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**EDUCATION**

**Ph.D in Electrical Engineering** (Apr'07 – Till Date)  
**Stanford University, CA, USA**  
**Advisor : Prof. Philip Levis**

**M.S. in Electrical Engineering** (Sept'05 – Apr'07)  
**Stanford University, CA, USA**  
**Advisor : Prof. Philip Levis**

**B.S. in Electrical Engineering** (Aug'98 – Mar'05)  
**Seoul National University**

**CURRENT RESEARCH**

**Stanford Information Networks Group** ('06 – Till Date)

- *Single-channel Full Duplex Radio*
- *PHY/MAC/Network layer for Full Duplex Radios*
- *Protocol Isolation in Wireless Networks*
- *Collision Avoidance in Wireless Mesh Networks*
- *Network protocols in Wireless Mesh Networks*

**PEER REVIEWED PUBLICATIONS**

1. **Jung Il Choi**, Mayank Jain, Maria A. Kazandjieva, and Philip Levis. "Granting Silence to Avoid Wireless Collisions". In Proceedings of the 18th IEEE International Conference on Network Protocols (ICNP), 2010.
2. **Jung Il Choi**, Mayank Jain, Kannan Srinivasan, Philip Levis, and Sachin Katti, "Achieving Single Channel Full-Duplex Wireless", In Proceedings of the 16th Annual International Conference on Mobile Computing and Networking (MobiCom), 2010
3. Kannan Srinivasan, Mayank Jain, **Jung Il Choi**, Tahir Azim, Edward S Kim, Philip Levis and Bhaskar Krishnamachari. "The  $\kappa$ -factor: Inferring Protocol Performance Using Inter-Link Reception Correlation". In Proceedings of the 16th Annual International Conference on Mobile Computing and Networking (MobiCom), 2010. **Received Best Paper Award.**
4. **Jung Il Choi**, Maria Kazandjieva, Mayank Jain, and Philip Levis "The Case for a Network Protocol Isolation Layer." In Proceedings of the 7th ACM Conference on Embedded Networked Sensor Systems (SenSys), 2009
5. Megan Wachs, **Jung Il Choi**, Jung Woo Lee, Kannan Srinivasan, Zhe Chen, Mayank Jain and Philip Levis "Visibility: A New Metric for Protocol Design." In Proceedings of the Fifth ACM Conference on Embedded Networked Sensor Systems (SenSys), 2007

6. **Jung Il Choi**, Jung Woo Lee, Megan Wachs, and Philip Levis, "Opening the Sensornet Black Box." In Proceedings of the International Workshop on Wireless Sensornet Architecture (WWSNA), 2007.

## **POSTERS AND DEMOS**

1. **Jung Il Choi**, Mayank Jain, Kannan Srinivasan, Richard Swensson, Philip Levis, and Sachin Katti, "A Working Single Channel, Full Duplex Wireless System", Demonstration at MobiCom 2010. **Received Best Demo Award.**
2. Kannan Srinivasan, Maria A. Kazandjieva, **Jung Il Choi**, Edward S Kim, Mayank Jain, Philip Levis, "SWAT: Fingerprinting Your Wireless Network", Demonstration at SIGCOMM 2009
3. **Jung Il Choi**, Jung Woo Lee, Zhe Chen, and Philip Levis, " Fair Waiting Protocol: Fairness and Isolation in Wireless Sensornets", In Proceedings of the Fifth ACM Conference on Embedded Networked Sensor Systems (SenSys), Poster, 2007

## **TECHNICAL REPORTS**

1. **Jung Il Choi**, Mayank Jain, Maria A. Kazandjieva, and Philip Levis, "Inverting Wireless Collision Avoidance.", Technical Report SING-09-00

## **PROFESSIONAL ACTIVITIES**

1. An author of TinyOS 2.x CC2420 Radio Stack
2. Web Chair of The 2nd ACM SIGMOBILE Workshop on Cognitive Wireless Networking (CoRoNet),2010

## **PREVIOUS WORK EXPERIENCE**

1. **Internship at KPMG (Korea)** *(Dec'02 – Mar'03)*
2. **Military Service in Republic of Korea Army** *(Oct'00 – Dec'02)*
3. **Samsung Industrial-educational camp: Digital Mobile Communications** *(Feb'04, 2 weeks)*

## **SKILLS**

1. Network device drivers in Linux (MadWiFi) and TinyOS (CC2420)
2. Application/Network layer design in Click router and TinyOS
3. USRP/USRPv2
4. Linux kernel-level programming
5. ns-2 network simulator

## **AWARDS**

1. Samsung Scholarship: Competitive PhD fellowship ('05-'10), awarding up to \$50,000 a year unconditionally for five years

## **REFERENCES**

Available on request